



ATARI

COMPUTER

ENTHUSIASTS

The Original ACE Monthly Newsletter

October 1987

3662 VINE MAPLE DRIVE, EUGENE, OR 97405

Mike Dunn, Jim Bumpas, Larry Gold -- Co-editors

Buddy Hammerton -- Production Director

Inside this issue you'll find the latest news and reviews concerning the latest in public domain and commercial software including:

ST Writer 2.0 Zoomracks Phantasie III

Flight Simulator II True BASIC ACTION! program listing

Important news from Atari Corporation



9/24/87
WILLIAM KING

As the sun sets on another summer, it time for more serious pursuits, and more personal computing.

News and Reviews

There have been a number of changes recently in the club. As you know, Ralph Walden, author of the *Oasis BBS* and the world famous ST program, *DCOPY* has moved from Eugene, leaving the BBS under served. We now have a new crew of people to support the BBS with fresh new programs and new life. Brad Thompson, a new member and enthusiastic BBS user will probably take over the BBS. Dick Young has recently obtained PC-Pursuit, and apparently is an insomniac, a perfect combination for us. Dick and his wife Nora now have an ST as well as and 8-bit Atari; they have done a good job as the 8-bit librarians. They now will also be taking over the ST library, since they will be getting all the new programs. Mike Rogers did a fine job before, but it should be simpler for you now with only one address to worry about to order your ACE disks. Send you 8 or 16 bit disk orders or requests for library lists (specify which) to Dick and Nora Young, 105 Hansen Lane, Eugene, OR 97404.

Last month, the listing on page 9 was a continuation of the listing in the previous issue, Blockbreaker, by Dave Hitchens of Page 6. The title was apparently lost.

This month, we welcome back Stan Ockers. Stan was the programmer who put ACE on the map, the original ACE programs classics such as Doggie, Tiny Text and many others. Stan loves to program in *ACTION!*, but has been very busy lately. We welcome and appreciate his new program, a disk utility written in *ACTION!* for 8-bit users. There is a run-time version for those of you who do not have *ACTION!*, it will be on a future ACE disk soon.

A number of new really fine public domain programs have recently become available for the ST, including a new, very enhanced *ST Writer 2.0* that I am using to write this article with and allows you to use the mouse, and from P.A.C.E., a very nice disk label program to print directories of your ST disks on disk labels. Read the Youngs article for more details.



New releases include from the German ST company, Abacus Software (POB 7219, Grand Rapids, MI 49510), *BECKERtext ST* (\$100), a professional word high speed word processor with fast WYSIWYG formatting, auto hyphenation, use of the RS-232 port for up and down loading, many printer drivers, built in calculator and online dictionary for checking your spelling. It also has a flexible C editor that checks the C syntax on line. All for \$100 -- sounds really good; hope they send us a review copy. They have also released a spelling checker for *TextPro* for only \$20 -- now included free with the \$50 *TextPro*. Another fine program from Abacus is *ChartPak ST* allowing you to make all kinds of charts. This GEM based program is very powerful and interfaces with Abacus' *PaintPro ST* and *PowerLedger ST* spreadsheet. The charts included in the press release are very impressive.

MichTron (576 S. Telegraph, Pontiac, Mi 48053) has release The *GFA BASIC Companion*, allowing you to easily make all kinds of GEM dialog boxes (\$50), *TuneUp!*, a \$50 program to rewrite your hard disk files contiguously to speed them up, a new math series starting with *Algebra I* (\$40), and *220-ST*, a \$50 VT220 terminal emulator. Incidentally, one of my favorite programs from Migraph is *LabelMaster Elite*, a program allowing you to design all kinds of labels on your ST, put graphics on them, print out on any kind of label, and also has a mailing list program built in. I have not used the mailing list function, since I use *ZoomRacks II* for that, but the rest of the program is extremely easy to use and makes very nice labels. It also prints out the ST disk directory, so you can make some very nice disk labels.

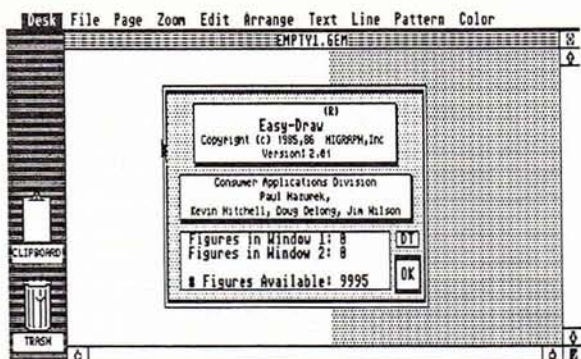
Soft Logik (11137 S. Towne Sq. Ste C, St. Louis MO 63123), has *Partner Fonts*, a \$30 disk for Publishing Partner (the program we now produce the newsletter with, allowing us to cut our typesetting costs from \$170 a month to \$18 a month and produce a nicer newsletter). This includes three new fonts, print drivers for new 9, 18 and 24 pin printers and drivers for Hewlett Packett LaserJet+, Series II and compatibles- all for only \$30!. If you have ever seen what printer drivers or fonts for other desk top publishing programs cost, this is an amazing low price- keep up the good work, Soft Logik!

Best Electronics (2021 The Alameda, Suite 290, San Jose, CA 95126, 408-243-6950), long a reliable source of parts for 8-bit computers, now has parts for ST computers, including power supplies, mother boards, keyboards, drives, service manuals, connectors of all kinds, etc.

--Mike Dunn, A.C.E. Co-Editor

Bumpas' Reviews

MIGRAPH, publishers of *EASY-DRAW* and the *M/CADD* System also produce a newsletter. The newsletter is sent to all registered owners of MiGraph products to keep them informed of new products and upgrades. They also publish their technical support phone number. MiGraph seems to be doing an excellent job supporting their customers. By the way, aren't I a registered user? Put me on your regular mailing list. Thanks!



HARDBALL from Accolade Software is now my favorite baseball game on the computer. I usually play 20 or so softball games every summer, but this game lets me play in the winter when it's raining.

The game may be played by joystick or mouse. The roster contains substitute players (most importantly pitchers) which can replace those in the line-up. You may choose to play either side, or you may have two players.

The defensive player controls both the pitching and the fielding. Each pitcher has a repertoire of pitches, and you may select one of 9 points on a target grid at which to throw your pitch. Any pitch might be a strike, but those closer to the center of the strike zone will have a higher chance of being a strike.

The batter likewise may aim his bat at any of the 9 points in the target grid. Upon a hit, the screen shifts to the half of the field (left side or right side) into which the ball is hit. The defensive player maneuvers the active fielder to the ball and tries to make the play. If the ball passes one active player and comes closer to another (as with ground balls through the infield into the outfield), the active player shifts to the one closest to the ball.

Once on base, the offensive player may proceed to the next base or stop on first. He may also steal bases or hit and run. The game really centers on the pitching duel. And the graphics on this screen gives you a "camera shot" from left center field, over the pitcher's shoulder. The players are drawn with good detail.

The computer is difficult to beat for me so far. As I become more used to judging where the ball is, I find I can improve my batting dramatically. I need to watch both the ball and its shadow in order to do well -- especially on defense. I don't think I can really play "fantasy" baseball with this game, as one's control of the roster is limited. But for a rousing good time with a baseball buddy for a couple of hours, this game is unsurpassed.

IMG SCAN (\$99 from Seymour-Radix, Box 166055, Irving, TX 75016) provides you with an inexpensive way to transfer images from paper into your ST computer. You need to have a printer. There is a board (not a cartridge, since they don't cover the board!) to plug into the cartridge slot with two fiber-optic cables. The cables attach to infra-red emitters on the board, and are joined together at the other end, which you attach (tape!) to the printhead. Run the software provided on the disk. They have software for both monochrome and color systems. But I was unable to get satisfactory results on a monochrome system.

Next, you place your copy (they recommend using a photocopy of whatever image you want to use) into the printer. Aim a white area of the image at the cable end and adjust the distance between the cable and the paper until you get a number less than 15 or so on the sensitivity scale. Then place the paper so you'll scan as much as you want of the image and go!

The software gives you lots of control. While it will not scan color, you can adjust the color scales to match the colors of the scanned image and produce a good color reproduction. The software seems to give you great control over grey scaling (up to 255 increments!). One of my early efforts was a black and white line drawing, but it came out looking like a turn-of-the-century impressionistic painting. Most of the white area was shaded. I learned later this occurs because I did not have the sensitivity low enough (I think it was in the 20's). You can also size the image coming in, and you can "aim" the scanner to a particular area on the original copy.

It says it scans at the resolution used by your printer. I tried it on a Star SG-10 (9-pin) and a Star NB 24/10 (24-pin) and did not detect any differences. I didn't see any software control for accessing "double" or "quadruple" density graphics on my Star printers. I have printed out my images with both *D.E.G.A.S.* and *Publishing Partner* and got good results. Pictures can be saved in 3 formats: *DEGAS*, *NeoChrome*, and "Raw". You'll want to save it in raw form if you want to manipulate it later with the *IMG Scan* software.

I'm including a document I made with *IMG Scan*. It's a cover to a training manual we produced in our office. The graphic image was scanned from a line drawing produced by a graphic artist. I put it under the watchful eyes of the *IMG Scan* and into *Publishing Partner*. I

think it came out very well. I've read where others recommend various lighting conditions while scanning. I've obtained my best results in a darkened room.

Phantasie III (\$60, SSI) is the third in the series of player efforts to defeat Nikademus' invasion. This is the final battle. The terrain is new, the dungeons are new, and the non-material planes are larger and more numerous than ever. The game mechanics will be familiar to players of the earlier versions. And you can bring your old set of characters with you into this new adventure. I lost my old set of characters and so had to start over again. I don't think it cost me any time or effort. I used to to create a good set of characters.

One new item which will help avoid discouraging new players: When you get totally wiped out you have a good chance of getting your characters resurrected in the "bone yard" (my term). And characters which are not resurrected become "undead". These undead characters can be very helpful. They are level 20 characters with tons of spells, including "Resurrect". The disadvantage is these undead characters can no longer grow in skill or abilities. Each time you resurrect a dead character, it loses some of its constitution. So you end up with some pretty flimsy characters after awhile.

This is a good game and a worthy culmination of the *Phantasie* series. If you've been following it, you'll want to have this one to finish the series. If you haven't been following the series and just want to get a great adventure game, this one will satisfy you.

Zoomracks

Zoomracks is *Hypercard* (on the Macintosh) without the "Hype". We originated the card and stack metaphor, and do most of what *Hypercard* does. We also do some things it doesn't do, and we will do more. *Zoomracks II* has been shipping on the IBM PC and the Atari ST since November, 1986. *Zoomracks* and *Hypercard* are the only personal computer software products based upon the card and stack metaphor.

Zoomracks is not as sexy as *Hypercard* -- yet. It does not have graphics, for example. However, somethings -- simple word processing, mail merge, and balancing a checkbook -- are easy to do in *Zoomracks* without programming. These are not so easy to do in *Hypercard*. As with *Visicalc*, it takes 3 to 12 months of regular use to appreciate the power and versatility of the new card and stack concept. We surveyed *Zoomracks* users, most of whom have used it for 6 to 12 months. This survey strongly suggests the card and stack metaphor is indeed an important new genre.

The average user uses *Zoomracks* for 5.2 applications and users include writers, small businesses, professionals, Fortune 500 managers, homemakers and

students.

Hypercard uses the same metaphor as *Zoomracks*. Both are "card and stacks environment data bases" (casebases), providing an erector set which one can use to snap together applications. Both are free format data bases based upon the metaphor of multiple stacks of cards. Neither is relational. Both support a wide variety of applications and the simple intermixing of new applications. Both are an "erector set" allowing unsophisticated users to snap together, share and market applications.

There are substantial differences. *Hypercard* starts with the effect and builds towards the substance of the metaphor. As a result, *Hypercard*'s strength is in presentation where graphics and fonts are important. *Zoomracks* starts from the substance and builds outward towards what the user sees. *Zoomracks* supports a wider variety of tasks within its version of the card and stack metaphor. *Hypercard* does not support the print formatting provided by *Zoomracks* output forms. *Zoomracks* stacks are stored in racks, letting you view the first line of several cards at once, or even several stacks at once. Its flexible visual output formatting supports mail merge. Many *Zoomracks* users do almost all the computing for their small businesses, including record keeping, accounting, correspondence, mail merge, and invoicing.

Users can figure out a way to do most things they want with either *Zoomracks* or *Hypercard*. The result is not always efficient or elegant. But typically, one tries something, sees a better way, and changes it. Users are able to keep everything "provisional". This keeps users enthusiastic. [Editor's note: This article was edited from 4 submissions by Paul Heckel] Quickview Systems, 146 Main Street, Los Altos, CA 94022, (415) 965-0327

-- Paul Heckel, *Zoomracks* Author

Flight Simulator II

Ver. 1.1 New features



1. The same disk now includes both color and monochrome versions of the program. *Flight Simulator II* automatically determines your monitor type and loads the appropriate program version when you boot the disk. From a functional standpoint, both programs are identical.

2. A joystick may be used to fly the aircraft. Plug the joystick into mouse port #1. Press the (J) key to switch between mouse and joystick control mode. The joystick will not function in mouse mode. In joystick control mode, both the mouse and joystick are functional but the right mouse button functions like the joystick button. To

center your ailerons, press the joystick button and push the stick left or right. Press the joystick button and move the stick forward or back to adjust your throttle. It is most convenient to use the keypad controls for rudder and brakes when in this control mode.

3. New features for Multi-Player mode:

A. Setting the ADF Frequency to 000 causes the ADF needle to point at the other player's aircraft. Setting the ADF Frequency to 001 additionally displays the distance to the other aircraft on the DME gauge.

B. Enable Autopilot Lock in other player's plane. As always, autopilot is enabled/disabled by pressing the **Z** key.

4. It is now possible to run *Flight Simulator II* from hard disk. Copy all files to any hard disk folder. Execute FS2.PRГ to load and run the program.

Note: FS2.PRГ may be placed in a AUTO folder to autorun the program at boot time.

In other news from subLOGIC:

New Western Europe scenery disks are under development. The disks will cover southern England, northern France, and southern West Germany. Scenery detail will be comparable to the amount and quality of scenery included on their most recent U.S. Scenery Disks.



A first for subLOGIC; *Flight Simulator II* has been released on a ROM cartridge to be included free with the new Atari XE game machine. This machine is due to be released in time for the upcoming Christmas season. This version of *Flight Simulator II* is substantially unchanged from the Atari 800/XL/XE disk version already available on the market. The *Flight Simulator II* program code and scenery databases have been put into a single ROM cartridge. Frame rate performance on this new version is the same as on previous versions, but since there is no longer any disk communications time overhead, editor mode access and database loading times are almost instantaneous!

--Permission to reprint granted from subLOGIC Corp.

ChessBase



The world's first chess database that runs on a microcomputer." It is the most important development in chess study since the invention of printing." Garry Kasparov - World Champion

What is *ChessBase*? *ChessBase* is a powerful database

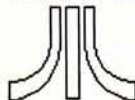
which displays, classifies, stores and retrieves chess games. You can create your own games collections with up to 5000 games on one disk - just think, an entire chess library on a single disk! Superb chessboard graphics allow high speed replay of games, in front of your very eyes - backwards and forwards! Powerful openings classification sorts games by openings - ECO, New in Chess, or by your own criteria. Games can be retrieved by specifying player, opening, date, etc., greatly reducing the time spent preparing for specific opponents or searching for recent games by your favourite player. *ChessBase* runs on the Atari ST and IBM-compatible machines. It is extremely user-friendly - you don't have to be a computer whizz to use it.

Who is *ChessBase* for? The World Champion - Garry Kasparov swears by it and has used it in preparation for some notable victories: his 7-1 whitewash of the Hamburg chess squad and his crushing victory against the Swiss Olympiad team. Chess professionals use it with devastating effect in preparation for tournaments, for specific opponents or just general training. Miles used it to come first in the Philadelphia Open (winning \$16,000 US) and Korchnoi won the Zagreb Interzonal by a convincing margin and qualified for the Candidates again, using *ChessBase*. Aspiring internationals cannot afford to be left behind. Opening theory is advancing more rapidly than ever, and *ChessBase* will help you to keep abreast with current developments. *ChessBase* has improved the results of many players by 100 Elo points. Club players will get endless hours of pleasure from *ChessBase*. It has never been easier to look at recent games, work on a new opening or store your favorite games for reviewing at a later date. Use it to keep track of your correspondence games and try out ideas and variations. Annotate games yourself and swap them with friends. Keen amateurs - create databases on your favourite players, your most memorable victories, games against your computer... The list is endless.

For further information please contact: Frederic Friedel, Hauptstrasse 28 B, 2114 Hollenstedt, West Germany, Tel.: (01149) 4 165-8566 You may also drop an Email to Christian Schmitz-Moormann 73637,377 on Compuserve and I will forward your request.

--Reprinted from ST Report #8

ATARI NEWS UPDATE



dealers.

The XEP80 80-column adapters are in the Atari warehouse in Sunnyvale and are available for immediate shipment to

The XEP80 plugs into the 2nd joystick port of any Atari 8-bit computer. Any video monitor can plug into the XEP80 and deliver true 80-column text. An extra port on the XEP80 allows standard parallel printers (ST or IBM

The driver program for the XEP80 lets it take the place of the E: device. Software that is compatible with the E: device (such as Atari BASIC) will work in 80 columns without modification. Other software that writes directly to the screen (bypassing the OS) would need modification before working in 80 columns.

Atari is working on AtariWriter 80 and Silent Butler 80 to support the XEP80. Delivery dates on these products are not yet set.

The XEP80 retails for \$79.95.

The new XE Game System has also arrived in Sunnyvale and is on its way to toy stores and other retailers in the USA.

The XE Game System retails for \$149.95. It comes with a sophisticated keyboard, a light gun, and three top games including Flight Simulator II, Missile Command, and Bug Hunt.

The Groundglass System

The Groundglass System is a software/hardware package for all professional photographers. It is being offered as a complete package, including everything needed to get up and running...the computer, the monitor (color or mono available), mouse, high speed printer, clock card, paper, disks ...yes.... everything needed! No extras!

The software can be purchased separately, if you have either an IBM or Atari ST. Groundglass Systems recommends the ST due to its lower price, fast operating speed, GEM desktop, and the availability of additional RAM. Current RAM upgrades can increase internal memory as much as 3 MEG! This is perfect for *The Groundglass System*, since it is a RAM based system, allowing fast access to a great amount of data. Hard drives are, of course, supported....and recommended for memory intensive applications, such as stock photo files. A 20 MEG hard drive can contain up to 200,000 stock photo files. (a conservative estimate)

The Groundglass System is not one of those "command-oriented" or "window" operated systems, but something unique...a new metaphor for the rest of us. The commands are offered in an on screen menu, and can be activated by either a click of the mouse, a function key, a keystroke, or a combination of all three....it's almost impossible to get lost in this program. There are many different approaches to on-screen help, also.

Output Forms and Macros. Groundglass has also included custom output forms, such as; invoices, past due notices for assignments and stock usage, schedules, personal diary, form letters (custom & user defined),

inventory, price lists, production reports, pre-production estimates, assignment estimates, stock photo shipping memos, labels, envelopes, sales form letters, intro letters, and of course, many types of accounting reports. The output forms are also stored on cards in racks, like everything else in this program.

A Sense of "Place". The racks and cards concept is truly a "real world" concept, unlike anything you've seen on a computer's display. It gives you a real sense of "place".... If you are on a card in your rolodex rack, calling a client, and he asks you about a current job.....click over to the "Jobfile" rack and simply "Zoom in" on the card for his job....Done! You have a sense of having worked with this system before, perhaps you have a rack hanging on your wall right now, with jobfiles sitting in each slot...you simply reach out and pull a file (or card) out of the rack! It's the same thing with this program. In fact, Groundglass has discovered that when giving on-site demos of the system, the photographers seem to understand the display in one or two minutes! In essence, anything that you are doing in the "real world" with paper, pens, calculators, typewriters, xerox machine.....are done with the Groundglass System!

Searching. The search functions are really fast....if you type in "Thanksg" in the "event" field of the "Schedule" rack of cards, it will find the card that contains "Thanksgiving" in LESS than a second! And that's without typing in the whole word! You can search any field on any rack, whenever you wish. You may also do a "Search-Lock". If, for instance, you need to send a party invitation (as a form letter) to all of your clients, you would simply go to the "Type" field on any Rolodex card, enter "Client" (or any other code word you choose for "Clients") and press "F8" (do search). This will find the first card it comes to with the word "Client" in the Type field. Then press, "SHIFT F8" (search-lock), and you will have all of your clients cards listed, separated from any other "Type" of rolodex cards.

--Reprinted from ST Report #8

PHANTASIE III

S.S.I.'s successful Phantasie series is available for all leading computers. The third installment, subtitled, *The Wrath of Nikademus*, has arrived in ST format. Like its predecessors, *Phantasie III* sports special ST graphics and mouse interaction. This newest version also has a scrolling background and an updated set of monsters. (Avid phantasie players may remember that the first 2 in the series had the same monster graphics).

Phantasie III has some additional features such as the ability to set the fighting formation of your warriors and an enhanced battle sequence which shows the body parts wounded (or lopped off) during combat. These

an enhanced battle sequence which shows the body parts wounded (or lopped off) during combat. These enhancements in *Phantasie III* take a little getting used to, but they add a touch of realism to the game.

Most of the game genre unfolds substantially like the others although I felt there were fewer loose ends than in *Phantasie II*. The *Phantasie* game formats all weave puzzle/solving and role*playing to the hilt. The outcome depends upon your ability to deduce which spells to cast and at what time while simultaneously keeping your 6 adventurers healthy.

Aside from good graphics and a story line that offers some escapism, I feel that all the *Phantasies* had some limitations. All of these adventures supplied entertainment but in my estimation lacked distinction to be great games. For example, there are frequent moments in the series where I would get bogged down endlessly fighting fire beetles or a no challenge opponent. Some combat situations were not very interesting because they were predictable.

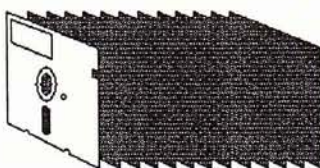
I would have liked to see the series develop where one had to finish *Phantasie I* before *II* and then *Phantasie II* before *III*. This would have enabled more continuity and interdependence in the series.

For me, the difference between *Phantasie III* and its predecessors is that the climax)))the final confrontation between good and evil))) is considerably more difficult than in the previous *Phantasies*. It takes some real strategy to defeat Nikademus as fire/power and spells alone will not do it.

The strong point in all the *Phantasie* games has been the ease of play through the use of the mouse. S.S.I. has created in these games a "clinic" on how the mouse should be used in programs. With the mouse, you are able to concentrate totally on the game rather than worrying about how to interface your responses to various game situations. I hope this trend continues with S.S.I.'s future ST releases.

-- Graham Smith, ACE Vice President

A.C.E. 8-BIT LIBRARY



BEST OF ACE #19

BERTIE-- A variation of the classic game of Q-Bert. The object of the game is to move Bertie about so that the colours in every cube on the screen without falling off the pyramid, falling into the hole (which moves!) or

being caught by the frog.

CHASE--For those of you who enjoy more sedate or traditional games or who would like a good family game for up to four players, here is THE CHASE. The program is based on the popular board game of 'Ludo'.

CODECONV--Resistor Colour Code Converter-This program takes an input of three colours and converts them into their respective numerical values.

SONAR--Seek...locate...destory! Sonar Search is a submarine hunt game in the classic style of seeking targets by deduction and logic. You are presented with a grid and by using the joystick have to place a cursor in the position that you think the enemy submarine is located.

TRAIN CRAZY--Oscar the Ostrich prefers the fresh air and likes to travel on top of the train No problem of course until the train comes to a tunnel or worse that the Railway Company don't like birds and so have ung chains with diamonds. The game is loaded in two parts. Part One loads the program TRAIN then CRAZY (Part Two) loads automatically.

EDUCATION #19

Erase #19 and the first three of #20 comes from S*P*A*C*E--The Seattle Puget Sound Atari Computer Enthusiasts in Tacoma, WA

CHALLENGE--A word game for 2. You need to guess that 5-letter word before your opponent does. Definitions provided.

COUNTING--Count the number of objects that match the object at the bottom of the screen.

RALLY--Enter a four-wheel drive cross-country rally. Solve the math problems in time to stop the hazards and continue the race.

PRECOUNT--An short program that allows you to count the blocks and press the right number.

ELEMENTS--Draws elements using the name or symbol or atomic number as its input.

MONSTER--Those Snowflake Curves can be drawn using triangles, squares, pentagons, etc. Also can make an anti-snowflakes.

EDUCATION #20

LCIRUIT--A circuit-building program that builds circuits like blocks in a construction set. Use the joysticks to position the circuits. Can analyze the circuits' logic.

SECTORS BY STAN OCKERS

This is a program to investigate and change sectors on a single sided, single density disk in drive #1. When run, it will ask for a sector number. The sector will be listed on the screen as ATASCII characters. An arrow cursor can be moved to any character using the CONTROL arrow keys.

The selected byte will be listed in hex in a box at the top of the screen. There are individual printable characters for every value except \$9B (RETURN). The same character as used for CLEAR, (funny arrow), appears for both \$7D and \$9B.

You can change the selected byte by pressing 'H' for Hex and then pressing two hex digits. Be careful, you can mess up a disk pretty fast if you don't know what you are doing!

You can select the next sector by pressing '+' or the previous sector by pressing '-'. To change to a new sector, press 'ESC' and enter the sector number when prompted. If you choose a directory sector (361-368), the directory information will be listed to the lower left portion of the screen.

Link information is listed on the right side of the screen. To change the link sector press 'L' and enter the corrected link number. The file number can also be changed by pressing 'F'. These changes as well as any hex byte changes will appear on the screen but will not be changed on the disk until the 'S' option (Save changes) is chosen.

MODULE; *** SECTORS PROGRAM ***

BYTE ARRAY buffer(128)

BYTE bloc

CARD nbr

PROC Dskinv=\$E453 () ; Disk entry

PROC Box(BYTE x,y,w,h) ; Draw box

BYTE j

Position(x,y) Put(17)

FOR j=2 TO w DO Put(18) OD Put(5)

FOR j=1 TO h-2 DO

Position(x,y+j) Put(124)

Position(x+w,y+j) Put(124) OD

Position(x,y+h-1) Put(26)

FOR j=2 TO w DO Put(18) OD Put(3)

RETURN

PROC Lnkinfo() ; Extract & Print link

CARD nextsect

Position(27,14) Print("File #")

PrintB(buffer(125) RSH 2) Print(" "

)

nextsect=(buffer(125) & 3)*256+buffer(126)

IF nextsect=0 THEN

Position(27,15) Print("Last Sec")

ELSE

Position(27,15) Print("Link ")

Position(32,15) PrintC(nextsect) FI

RETURN

PROC Prtsect() ; Print sector in ATASCII

BYTE j,k,flag

BYTE ARRAY escch=[27 28 29 30 31 125

126 127 156 157 158 159 253 254 255]

Position(10,1) Print(" Sector #

")

PrintC(nbr) Print(" ")

Poke(82,4) Poke(83,35) ; narrow column

Position(4,4)

FOR j = 0 TO 127 DO flag = 0 Put(32)

FOR k=0 TO 14 DO

IF buffer(j) = escch(k) THEN

Put(27) Put(buffer(j))

flag = 1 EXIT FI

OD

IF flag = 0 THEN

IF buffer(j) = 155 THEN

Put(27) Put(125)

ELSE Put(buffer(j)) FI FI

OD

Poke(82,2) Poke(83,39)

Box(3,3,33,10)

Box(27,17,12,6) Position(28,18)

Print("350 new ") Position(28,19)

Print("File# Link#") Position(28,20)

Print("Hex Save") Position(28,21

Print("CTRL ") Put(27) Put(28) Put(27)

Put(29) Put(27) Put(30) Put(27) Put(31)

IF (nbr>3 AND nbr<368) OR nbr>368 THEN

Lnkinfo() FI

RETURN

PROC Prtdir() ; Print Directory

BYTE j,k,x

CARD addr

Position(2,15)

FOR j=0 TO 7 DO

x=16*j PrintB((nbr-361)*8+j)

Put(32)

addr=buffer(x+1)+256*buffer(x+2)

PrintC(addr) Put(32)

addr=buffer(x+3)+256*buffer(x+4)

PrintC(addr) Put(32)

FOR k=5 TO 15 DO

Put(buffer(x+k)) OD PrintE(" ")

OD

Position(27,14) Print(" ")

Position(27,15) Print(" ")

RETURN

PROC Newlink() ; Change Link

CARD temp

BYTE low,hi,fnbr

Poke(764,255)

Position(10,1) Print("Enter link#")

Position(26,1) temp=InputC()

fnbr=buffer(125) & \$F8

low=temp hi=temp RSH 8

buffer(125)=(hi % fnbr) buffer(126)=

low

Prtsect()

RETURN

PROC Newfile() ; Change File #

BYTE temp,fnbr

Poke(764,255)

Position(10,1) Print("Enter file#")

Position(26,1) fnbr=InputB()

temp=buffer(125) & 3

buffer(125)=temp % (fnbr LSH 2)

Prtsect()

RETURN


```

PROC Hexbyt(BYTE h) ; Print Hex valu
e
BYTE ARRAY hex=['0 '1 '2 '3 '4 '5
'6 '7 '8 '9 'A 'B 'C 'D 'E 'F]
Put(hex(h/16))
Put(hex(h MOD 16))
RETURN

```

```
PROC Inhex() ; Change byte in sector
```

```
BYTE ARRAY key=[50 31 30 26 24 29 27
```

```

51 53 48 63 21 18 58 42 56]
BYTE ARRAY hex=['0 '1 '2 '3 '4 '5
'6 '7 '8 '9 'A 'B 'C 'D 'E 'F]
BYTE j,flag,hnbr
Poke(764,255)
Position(10,1) Print("Enter hex #:
")
Position(35,1) Print(" ") Position(
35,1)
hnbr = 0 flag = 0
DO ; First digit
WHILE Peek(764)=255 DO OD
FOR j=0 TO 15 DO
IF Peek(764) = key(j) THEN
hnbr=hnbr+16*j Put(hex(j))
flag=1 EXIT FI
OD
UNTIL flag=1
OD
flag = 0 Poke(764,255)
DO ; Second digit
WHILE Peek(764)=255 DO OD
FOR j=0 TO 15 DO
IF Peek(764) = key(j) THEN
hnbr=hnbr+j Put(hex(j))
flag=1 EXIT FI
OD
UNTIL flag=1
OD
buffer(bloc)=hnbr Poke(764,255)
Prtsect()
RETURN

```

```

PROC Delay() ; Wait for key release
Poke(764,255) Position(35,1)
Hexbyt(buffer(bloc))
WHILE Peek(764)<255 DO OD
RETURN

```

```

PROC Wrtsect() ; Write new sector
Poke(764,255) Position(10,1)
Print("WRITE #:") PrintC(nbr)
Print(" SURE ? ")
WHILE Peek(764)=255 DO OD
IF Peek(764)=43 OR Peek(764)=107 THE
N

```

```

Poke($302,$57) Pock($030A,nbr)
Dskinv()
FI
Poke(764,255) Prtsect()
RETURN

PROC Main() ; Sectors Program
BYTE x,y,ch
Poke($0301,1) Pock($0304,buffer)
Put(125) Pock(752,1) Box(9,0,23,3)
Box(33,0,4,3) Position(34,1) Put('$)

WHILE 1=1 DO ; infinite loop
Position(10,1)
Print("Enter Sector #: ")
Position(26,1) nbr = InputC() ch =
0
WHILE ch < 28 DO ; While not ESC
Poke($0302,$52) ; Read disk sect
or
Pock($030A,nbr) Dskinv()
Prtsect() ; and put on screen
IF nbr>360 AND nbr<369 THEN
Prtdir()
FI
x=4 y=4 bloc=0 Position(35,1)
Hexbyt(buffer(bloc))
Poke(764,255) ch=255 Pock(752,1)
WHILE 1=1 DO ; Get a key
Position(x,y) Put(27) Put(31)

ch = Peek(764)
IF ch = 0 THEN Newlink() FI
IF ch = 56 THEN Newfile() FI
IF ch = 57 THEN Inhex() FI
IF ch = 62 THEN Wrtsect() FI
IF ch = 6 AND nbr < 719 THEN
nbr = nbr + 1 EXIT FI
IF ch = 14 AND nbr > 1 THEN
nbr = nbr -1 EXIT FI
IF ch = 28 THEN EXIT FI
Position(x,y) Put(32)
IF ch=135 AND x<34 THEN
x=x+2 bloc=bloc+1 Delay()
FI
IF ch=134 AND x>4 THEN
x=x-2 bloc=bloc-1 Delay()
FI
IF ch=142 AND y>4 THEN
y=y-1 bloc=bloc-16 Delay()
FI
IF ch=143 AND y<11 THEN
y=y+1 bloc=bloc+16 Delay()
FI
OD
OD
OD
RETURN

```


LCM--Looks at several ways to view and find the concepts of Least Common Multiple (LCM).

PFAC TOR--Explores Prime and Prime Factorization--Their definitions, explanations, and examples. This program continues from the program LCM.

CODECONV--takes the input of three resistors' colours and converts them into their respective numerical values.

FLAG--An aid in identifying many national flags. Have the option of a quiz or continuous display.

EDUCATION #21

ALPHABEE.OBJ--Written in ACTION! by Stan Ockers. Using the joystick, you guide the bee to gather a letter of the alphabet in order; fly it to the bee hive and drop it off.

CHARLIE.OBJ--The Adventures of CHARLIE CHICKEN--Part 1--The hatching--By Stan Ockers. Written in ACTION! Charlie needs your help to get hatched. You must find out what egg he is in and have mother hen sit on him overnight.

GUESSNUM--Program is based on the verbal version. The computer picks a number randomly from 0 to 9 and puts it into its chips. The child guess the number with help of a numberline. There are 3 variations--Arrows, Stars, and None.

MATHFUN--Math practice for the four operation plus a general option. There are four timed levels. Also can review the times table. (FREEWARE VERSION)

READING1--Has three parts for reading practice. Sentences--fill in the blanks. Paragraphs--read the story the answer the questions. Easy reading --read a sentence then answer yes or no.

ROMANS--by Softswap. A program to reinforce Roman numerals. For 2 players. It asks two kinds of questions (ie. XXIII and 23) and keeps the score.

EDUCATIONAL PROGRAMS FOR THE AGES 3-6 YEARS

On this disk is the following programs which have been on previous Education disks: Alphabee.Obj; Charlie.Obj; ATrain; Counting; Guessnum; Oldmac; Precount; and Preschl

THE BEST OF BBS #3

SHRINKXE--Shrinker/Unshrinker for the 130XE.

Shrink XE is basically the same old thing as "normal" shrink with one new function, Verify, has been added. With documentation.

BUGGEYS--This binary game is similar to Pole Position. You are the driver in a cross-country sand dune race. There are three course for the AM or PRO levels.

KOALPRNT.BAS--This program will display and print Koala type pictures with their printers Epson, Gemini, Nec, and the Prowriter. It uses a machine language routine to decompress PIC files and display them plus read disk directory, and store PIC filenames.

OIL.BIN--This presentation from England briefly outlines the OIL extraction process proposed for the Archersville Development. It covers rigging and injection of a production well to its process facilities at Trotts Park. Very educational demo.

Disks may be ordered from ACE EXCHANGE LIBRARY for \$5.00 single and \$10.00 for double-sided disks. To ordered send your check, payable to: Atari Computer Enthusiasts. The Address is: ACE EXCH. LIBRARY, c/o Dick & Nora Young, 105 Hansen Lane, Eugene, OR 97404.

A.C.E. 16-Bit Library



The 16-bit library has moved from Mike Roger's home to our house. The new address is: A.C.E. EXCH. LIBRARY, c/o Dick & Nora Young, 105 Hansen Lane, Eugene, OR 97404

ST Writer (ver. 2.0)

If you love your 8-bit *ATARIWriter* then you will feel at home with the *ST Writer*. The program had the touch, the feel, and the looks of the original 8-bit but with the option of using the mouse in latest release of *ST Writer*. *ST Writer* uses the same basic commands like: Create File- writes a new text file; Delete File- erase a file; Edit File- revise a file that you are working on; and more. There are new commands like: Hires Flip-flop- switches for high res only between 22 lines and 37 lines; Receive File from 850- receive file transmitted from 8-bit Atari Computer using Atari 850 Interface Module; and more. There is many other small features such as paragraph indentation which is Control P. To get to the top of the file press Shift F1. *ST Writer* will replace specified string by pressing F7.

One of the newer features added to *ST Writer* is the fact that you can view the file as 80 columns page in high res without pressing for print preview as you would in 8-bit *ATARIWriter*.

Also, the large documentation has the feel of the original. Even *ST Writer* starts out with the exact words of the original. The documentation is included on disk. It will take you step by step to show you how to use *ST Writer*. By the way, *ST Writer* is a public-domain program and can be ordered from our ACE Exch. Library for 5.00 dollars.

True BASIC on the ST

Modern BASIC languages are considerably beyond the scope of the original BASIC programming language. Not only do the BASIC languages of today usually include a compiler, but they are much faster and include many very powerful features. BASICs are getting more sophisticated, and they are becoming more difficult to learn. There are many more key words and commands in modern interpretations.

There is a war going on among the BASIC language interpretations of computers. Each dialect makes extravagant "more authentic than thou" or, sometimes, "more true to the original" --- or, "closer to the Ansi Standard (who cares??) than thou," etc. As a user, I don't care who follows which standard or why. My concern is that an operating language is comfortable, easy to use, and interfaces with my computer without unnecessary complication. My other considerations are the speed of operation and the size of the execution code. For the ST, I have survived many BASICs in addition to incomplete and incoherent documentation. I have even survived *ST BASIC*.

Opening the *True BASIC* package, the thoroughness of the documentation and the quality of the work that went into the presentation is impressive. The initial *True BASIC ST* package contains a central language reference manual and a ST specific manual. Both of these documents are well written and easy to follow. *True BASIC* is a class product.

Unique from most programming basics, *True BASIC* contains fewer reserved words. Moreover, you can do a lot within the *True BASIC* scope. If you use labels, however, you will need to change your programming style. *True BASIC* allows recursion and relies on sub-routines to branch and return to various places within a program. Excluding labels, line numbers are an option. Moreover, with more modular thinking, sub-routines and recursion enable you to navigate very well in a *True BASIC* program. As a bonus, you become a stronger programmer who uses fewer commands to do the job.

The ability to store libraries of specific functions is an outstanding feature of *True BASIC*. Many supplementary specialized libraries are available to *True BASIC* at an added cost. At the time of this writing I

can only comment on the String and the 3-D Graphics libraries included in the review package.

The advanced string library offers extended string handling utilities for accessing strings and parts of strings. It includes some streamlined conversion routines. There are functions in the advanced string library for matching string patterns and creating templates for manipulation of string elements. This is a unique library, and it will be useful in some programs.

The 3-D Graphics library included functions for handling contour plots, 3-D transformations, and projections. There are routines for controlling aspect, perspective, scaling and rotation with simple to more complex drawing routines. There are some sample graphics programs included. There is also a section on making 3-D movies with *True BASIC*.

GEM functions are missing from the *True BASIC*. I was disappointed that I could not get a review copy of the Resource Construction Library. A BASIC without GEM for the ST limits programming.

Programers should note that *True BASIC* executes very fast. It is not as fast as the C language but holds its own very well with Pascal and most other BASIC's. My own tests involved subjecting *True BASIC* to 10 reiterations of "the sieve". In comparison to *GFA BASIC*, *True BASIC* was about 40% faster on my sieve program, but the execution code was much larger with *True BASIC*.

The cost of the *True BASIC* Program is reasonable until you begin adding in, (1) the cost of the libraries and, (2) the additional cost of a Developer's license plus a run-time package. I concluded that any advantage some programers might have with extra power was quickly offset by the total investment necessary to use that power. But for others, depending upon their needs, this program is a bargain. Programer's needs are not the same.

If you are a serious BASIC developer, you owe this package a long look. *True BASIC* is powerful. It is fast! It is very portable and extendable. That says a lot for any implementation.

In conclusion, I liked this package. When I find a *True BASIC* procedure awkward for me to use, it is because I have always done it differently. With a little patience, I find the *True BASIC* method much better logically and more streamlined than most. It is a considerable improvement over *ST BASIC*. What isn't?

-- Graham Smith, ACE Vice President

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